L is a linker selected from the group consisting of -alkylene-, -alkylene-C(O)—, -(alkylene-O)_n-alkylene-, -(alkylene-O)_m-alkylene-C(O)—,-(alkylene-O)_m—(CH₂)_n-NHC(O) (CH₂)_n-C(Me)₂-S—S—(CH₂)_n-NHC(O)_n-(alkylene-O)_n-alkylene-O)_n-alkylene-V, -alkylene-C (O)—W-, -(alkylene-O)_n-alkylene-U-alkylene-C (O)—, and -(alkylene-O)_n-alkylene-U-alkylene-; W has the structure of:

7. The compound of claim 1, where n is an integer from 0 to 10.

8. The compound of claim **1**, where n is an integer from 0 to 5.

9. The compound of claim 1, wherein Y is cyclooctyne.

10. The compound of claim 9, wherein the cyclooctyne has a structure of:

$$(R_{19})_q$$

each R_{19} is independently selected from the group consisting of C_1 - C_6 alkyl, C_1 - C_6 alkoxy, ester, ether, thioether, aminoalkyl, halogen, alkyl ester, aryl ester, amide, aryl amide, alkyl halide, alkyl amine, alkyl sulfonic acid, alkyl nitro, thioester, sulfonyl ester, halosulfonyl, nitrile, alkyl nitrile, and nitro; and

q is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or 11.

11. The compound of claim 1, wherein Y is azide.

12. The compound of claim 1, comprising Formula (II):

$$\begin{array}{c} Me \\ Me \\ H_2N \\ O \\ L \\ N \\ R_7 \\ O \\ Me \\ Me \\ Me \\ OMe \\ OMe \\ OMe \\ O \\ MeO \\ MeO \\ NH \\ OMe \\ ONH \\ ON$$

U has the structure of:

or L is absent, Y is methyl, R_5 is COR_8 , and R_8 is —NH-(alkylene-O)_n NH₂; and

each n, n', n", n" and n"" are independently integers greater than or equal to one.

2. The compound of claim 1, wherein R_5 is thiazole.

3. The compound of claim 1, wherein R_6 is H.

4. The compound of claim 1, wherein Ar is phenyl.

5. The compound of claim 1, wherein R_7 is methyl.

6. The compound of claim **1**, where n is an integer from 0 to 20.

13. The compound of claim 12, wherein L is -(alkylene-O)_n-alkylene-.

14. The compound of claim 13, wherein each alkylene is CH_2CH_2 , n is equal to 3, and R_7 is methyl.

15. The compound of claim 12, wherein L is -alkylene-.

16. The compound of claim **15**, wherein each alkylene is $-CH_2CH_2$ — and R_7 is methyl or hydrogen.

17. The compound of claim 12, wherein L is -(alkylene-O) $_n$ -alkylene C(O)—.

18. The compound of claim **17**, wherein each alkylene is —CH₂CH₂—, n is equal to 4, and R₇ is methyl.

19. The compound of claim **12**, wherein L is -(alkylene-O)_n—(CH₂)_n,—NHC(O)—(CH₂)_n,—C(Me)₂-S—S—(CH₂)_n,—NHC(O)-(alkylene-O)_n, alkylene-.

20. The compound of claim **19**, wherein each alkylene is $-CH_2CH_2$ -, n is equal to 1, n' is equal to 2, n" is equal to 1, n'' is equal to 2, n''' is equal to 4, and R_7 is methyl.